



10,694,280.

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PATENT

Agent's Docket  
No. 545-USA

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Patent No. : 6,996,298 B2  
Inventor : Nawfel Azami  
Issued : February 7, 2006  
Title : ALL-FIBER BROADBAND POLARIZATION COMBINER

**Certificate**  
**MAR 09 2006**  
**of Correction**

Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

Attention: Decision and Certificate of Correction Branch

**REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT  
FOR PTO MISTAKE (37 C.F.R. 1.322(A))**

Sir:

Attached, in duplicate, is a Form PTO/SB/44 showing the corrections to be made in the above identified patent.

The corrections are not due to any error by the applicant and therefore no fee is due. In this regard, we also enclose a copy of the claims that were submitted with the amendment of June 28, 2005 and subsequently allowed.

We shall await the certificate of correction in due course.

Respectfully submitted,

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March 2, 2006

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## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 6,996,298 B2

DATED : February 7, 2006

INVENTOR(S) : Nawfel AZAMI

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 4, line 25, "of" should be deleted.

Column 4, line 27, "wins" should be --arms--, and "also" should be deleted.

Column 4, line 38, "ventral" should be --central--.

MAILING ADDRESS OF SENDER:

PATENT NO. 6,996,298 B2

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No. of additional copies



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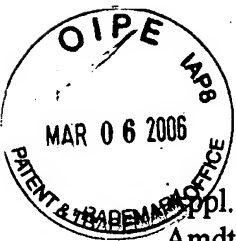
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App. No. 10/694,280

Amdt. dated June 28, 2005

Reply to Office Action of June 7, 2005

**Amendment to the Claims:**

This listing of claims will replace all prior versions of claims in the application.

1. (currently amended) An all-fiber broadband polarization combiner which has a Mach-Zehnder (MZ) structure having an entry coupler and an exit coupler interconnected in a central zone with two standard single mode (SM) fibers which form two arms ~~of~~ in said central zone of the MZ, said entry coupler having two input arms ~~also~~ made of SM fibers to which are spliced polarization maintaining (PM) fibers oriented so that polarization X in one PM fiber is orthogonal to polarization Y in the other PM fiber, and said exit coupler having two output arms also made of SM fibers, which constitute the exit arms of the broadband polarization combiner, said entry coupler being a polarization pump combiner (PPC) and said exit coupler being a wavelength division multiplexer (WDM) coupler which has essentially the same spectral spacing and is centered to essentially the same wavelength as the PPC, and a phase shift  $\Delta\phi$  of  $\pi$  being induced between the two arms of the central zone.
2. (original) A broadband polarization combiner according to claim 1, in which the phase shift  $\Delta\phi$  of  $\pi$  is induced between the two arms of the central zone of the MZ by subjecting one of the arms of the central zone to UV radiation.
3. (original) A broadband polarization combiner according to claim 1, in which the phase shift  $\Delta\phi$  of  $\pi$  is induced between the two arms of the central zone of the MZ by subjecting one of the arms of the central zone to mechanical stress.